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Joseph M. Barich
McAndrews, Held & Malloy, Ltd.
34th Floor
500 W. Madison Street
Chicago, IL 60661

EXAMINER

BOUTAH, ALINA A

ART UNIT PAPER NUMBER

2143

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/029,162

Applicant(s)

KATSMAN ET AL.

Examiner

Alina N. Boutah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7, 10-12, 14-17, 20, 28-30, 32-34, 37, 38, 40-44, 51 and 52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 10-12, 14-17, 20, 28-30, 32-34, 37-38, 40-44, and 51-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This action is in response to Applicant's amendment filed February 15, 2007. Claims 1-3, 5-7, 10-12, 14-17, 20, 28-30, 32-34, 37-38, 40-44, and 51-52 are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10 and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to disclose "a remote terminal for transmitting processed communications data to a medical imaging system" or "receiving processed communications data at said medical imaging system from said remote terminal" as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7, 10-12, 14-17, 20, 28-30, 32-34, 37-38, 40-44, and 51-52 rejected under 35 U.S.C. 103(a) as being unpatentable over Killcommons (USPN 6,424,996) in view of Balloni (US 2004/0260790).

Regarding claim 1, Killcommons teaches a system for remotely displaying a medical image, said system including:

a medical imaging system transmitting unprocessed medical imaging data to a remote terminal (figures 1 and 2A-2D; col. 3, line 58 to col. 4, line 30; col. 7, lines 44-51); and

a remote terminal for receiving said unprocessed medical imaging data, processing said unprocessed medical imaging data to form a medical image and displaying said medical image (figures 1 and 3; col. 4, lines 31-45; col. 7, lines 44-51).

However, Killcommons does not explicitly teach wherein said remote terminal sends commands to said medical imaging system. In an analogous art, Balloni teaches a remote control of an imaging system that sends commands to said medical imaging system [abstract; 0006; figure 2]. At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

Regarding claim 2, Killcommons teaches the system of claim 1 wherein said remote terminal performs post-processing on said unprocessed medical image data (col. 4, line 54 to col. 22).

Regarding claim 3, Killcommons teaches the system of claim 1 wherein said medical imaging system acquired said unprocessed medical imaging data (col. 3, line 58 to col. 4, line 30).

Regarding claim 5, Killcommons teaches the system of claim 1 wherein said medical imaging system also transmits audio data to said remote terminal (col. 1, line 66 to col. 2, line 9).

Regarding claim 6, Killcommons teaches the system of claim 1 wherein said medical imaging system also transmits system parameter data to said remote terminal (col. 3, line 58 to col. 4, line 30).

Regarding claim 7, Killcommons teaches a system for remotely controlling a medical imaging system, said system including:

a medical imaging system for performing at least one of pre-processing and post-processing functions (col. 4, line 54 to col. 5, line 22; col. 7, lines 44-51).

However, Killcommons does not explicitly teach a remote terminal for transmitting commands to the medical imaging system; and the medical imaging device receiving commands from the remote terminal.

In an analogous art, Balloni teaches a remote control of an imaging system that sends commands to said medical imaging system [abstract; 0006; figure 2]. At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

Regarding claim 10, Killcommons teaches a system for communication between the operator of a medical imaging device and the operator of remote terminal, said system including:

a medical imaging system transmitting unprocessed communications data to a remote terminal (col. 4, line 54 to col. 5 line 22; col. 7, lines 44-51); and

a remote terminal for receiving unprocessed communications data from said medical imaging system (col. 4, line 54 to col. 5, line 22; col. 7, lines 44-51).

However, Killcommons fails to explicitly teach the remote terminal for transmitting processed communications data to a medical imaging system and receiving unprocessed communications data from said medical imaging system, said remote terminal transmitting remote commands for execution at said medical imaging system with respect to processing of the communications data.

In an analogous art, Balloni teaches a remote control of an imaging system that sends commands to said medical imaging system [abstract; 0006; figure 2]. At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

Regarding claim 11, Killcommons teaches the system of claim 10 wherein said communications data is audio data (col. 1, line 66 to col. 2, line 5).

Regarding claim 12, Killcommons teaches the system of claim 10 wherein said communications data is video data (col. 1, line 66 to col. 2, line 5).

Regarding claim 14, Killcommons teaches the system of claim 10 wherein said communications data represents a verbal command (col. 7, lines 23-43).

Regarding claim 15, Killcommons teaches the system of claim 10 wherein said communications data is text data (col. 1, line 66 to col. 2, line 5)

Regarding claim 16, Killcommons teaches a system for remotely post-processing medical imaging data, said system including: a remote terminal receiving unprocessed medical information data, said remote terminal including a remote imaging processor receiving said unprocessed medical information data and post-processing said medical imaging data said remote terminal processing said unprocessed medical information data according to imaging parameters (figures 2A-D).

However, Killcommons does not explicitly teach, said imaging parameters being controlled by an operator at said remote terminal. In an analogous art, Balloni teaches a remote control of an imaging system that sends commands to said medical imaging system [abstract; 0006; figure 2]. At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

Regarding claim 17, Killcommons teaches the system of claim 16 wherein said unprocessed medical imaging data is sent by a medical imaging system to said remote terminal (figure 1).

Regarding claim 20, Killcommons teaches a remote terminal for use in a medical imaging system for remotely displaying a medical image, said remote terminal including:

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a remote data processor receiving unprocessed medical imaging data and preprocessing said unprocessed medical imaging data (figure 1);

a remote imaging processor for post-processing said medical imaging data to form a medical image; and a display for displaying said medical image (figure 1; col. 5, lines 5-22; col. 7, lines 44-51); and a display for displaying said medical image (figure 1).

However, Killcommons does not explicitly teach a remote console controlling imaging parameters at said remote imaging processor and relaying commands through said remote data processor to an imaging system.

In an analogous art, Balloni teaches a remote console controlling imaging parameters at said remote imaging processor and relaying commands through said remote data processor to an imaging system (figure 1). At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

Regarding claim 28, Killcommons teaches a method for remotely displaying a medical image, said method including the steps of:

transmitting unprocessed medical imaging data from a medical imaging system to a remote terminal (figure 1);

processing said unprocessed medical imaging data at said remote terminal to form a medical image; and displaying said medical image (figures 2A-D; col. 7, lines 44-51); and displaying said medical image (figure 1).

However, Killcommons does not explicitly teach sending commands to image data processing from said remote terminal to said medical imaging system.

In an analogous art, Balloni teaches a remote control of an imaging system that sends commands to said medical imaging system [abstract; 0006; figure 2]. At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

Regarding claim 29, Killcommons teaches the method of claim 28 further including the step of post-processing said unprocessed medical image data at said remote terminal (figure 3).

Regarding claim 30, Killcommons teaches the method of claim 28 further including the step of acquiring said unprocessed medical imaging data at said medical imaging system (figure 1).

Regarding claim 32, Killcommons teaches the method of claim 28 further including the step of transmitting audio data from said medical imaging system to said remote terminal (col. 7, lines 23-42).

Regarding claim 33, Killcommons teaches the method of claim 28 further including the step of transmitting system parameter data from said medical imaging system to said remote terminal (figure 1).

Regarding claim 34, Killcommons teaches a method for remotely controlling a medical imaging system, said method including the steps of:

Receiving commands at a medical imaging system (col. 5, lines 5-22); and executing said commands at said medical imaging system (col. 5, lines 5-22),

wherein said commands control at least one of pre-processing functions and post-processing functions of said medical imaging system (col. 4, line 54 to col. 5, line 22; col. 7, lines 44-51).

However, Killcommons does not explicitly teach a remote terminal for transmitting commands to the medical imaging system; and the medical imaging device receiving commands from the remote terminal.

In an analogous art, Balloni teaches a remote control of an imaging system that sends commands to said medical imaging system [abstract; 0006; figure 2]. At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

Regarding claim 37, Killcommons teaches a method for communication between the operator of a medical imaging device and the operator of remote terminal, said method including the steps of: transmitting unprocessed communications data to a remote terminal from a medical imaging system (col. 3, line 58 to col. 4, line 22; col. 7, lines 44-51).

However, Killcommons does not explicitly teach a remote terminal for transmitting commands to the medical imaging system; and the medical imaging device receiving commands from the remote terminal.

In an analogous art, Balloni teaches a remote control of an imaging system that sends commands to said medical imaging system [abstract; 0006; figure 2]. At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

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Regarding claim 39, Killcommons teaches the method of claim 37 wherein said communications data is uncompressed raw data (figure 1).

Regarding claim 40, Killcommons teaches the method of claim 37 wherein said communications data is video data (col. 1, line 67 to col. Line 9).

Regarding claim 41, Killcommons teaches the method of claim 37 wherein said communications data represents a verbal command (col. 7, lines 23-42).

Regarding claim 42, Killcommons teaches the method of claim 37 wherein said communications data is text data (col. 1, line 67 to col. Line 9).

Regarding claim 43, Killcommons teaches a method for remotely post-processing medical imaging data, said method including the steps of: receiving unprocessed medical imaging data at a remote terminal (figure 1); and post-processing said medical imaging data (figure 3).

However, Killcommons fail to explicitly teach wherein said remote terminal processes said unprocessed medical information data according to imaging parameters and wherein said imaging parameters are controlled by an operator at said remote terminal.

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In an analogous art, Bolloni teaches a remote terminal processes said unprocessed medical information data according to imaging parameters and wherein said imaging parameters are controlled by an operator at said remote terminal (figure 1).

At the time the invention was made, one of ordinary skill in the art would have been motivated to enable the remote terminal to send commands to the medical imaging system in order to allow remote terminal to directly operate the imaging system, thus providing more accurate diagnosis [0003].

Regarding claim 44, Killcommons teaches the method of claim 43 wherein said unprocessed medical imaging data is sent by a medical imaging system to said remote terminal (figure 1).

Regarding claim 45, Killcommons teaches the method of claim 43 wherein said remote terminal processes said unprocessed medical information data according to imaging parameters (figure 2).

Regarding claim 46, Killcommons teaches the method of claim 45 wherein said imaging parameters are controlled by an operator at said remote terminal (figure 1).

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Regarding claim 51, Killcommons teaches an imaging system for use in a medical imaging system for remotely displaying a medical image, said imaging system including: a data processor externally transmitting unprocessed medical imaging data for processing (figure 1).

Regarding claim 52, Killcommons teaches the imaging system of claim 51 further including a data acquisition processor acquiring imaging data and sending said imaging data to said data processor (figures 2A-D).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N. Boutah whose telephone number is 571-272-3908. The examiner can normally be reached on Monday-Friday (9:00 am - 5:00 pm).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100